

# Lab 11

## Counters & Check Boxes

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### GOALS:

1. Students will be able to use counters to determine how many times a button been clicked.
2. Students will be able to create checkboxes in their programs.

### ESSENTIAL QUESTIONS:

1. How can you use check boxes in a program?
2. Why is it important to use counters?

### Counters

Counter is a memory location that is add to or subtracted by the same amount each time the statement is run. Example:

```
intCount = intCount + 1
```

```
intNum = intNum - 1
```

Usually it is increased or decreased by one but it can be another constant not necessarily 1. Counters can be used to count how many times a user clicks on a button.

### Program

1. Create the following program.

#### Option Explicit

```
Private intNumClick1 As Integer
```

```
Private intNumClick2 As Integer
```

```
Private intNumClick3 As Integer
```

```
Private Sub Form_Load()
```

```
    intNumClick1 = 0
```

```
    intNumClick2 = 0
```

```
    intNumClick3 = 0
```

```
End Sub
```

```
Private Sub cmd1_Click()
```

```
    intNumClick1 = intNumClick1 + 1
```

```
    lblButton1Clicked.Caption = intNumClick1
```

```
End Sub
```

```
Private Sub cmd2_Click()
```

```
    intNumClick2 = intNumClick2 + 1
```

```
    lblButton2Clicked.Caption = intNumClick2
```

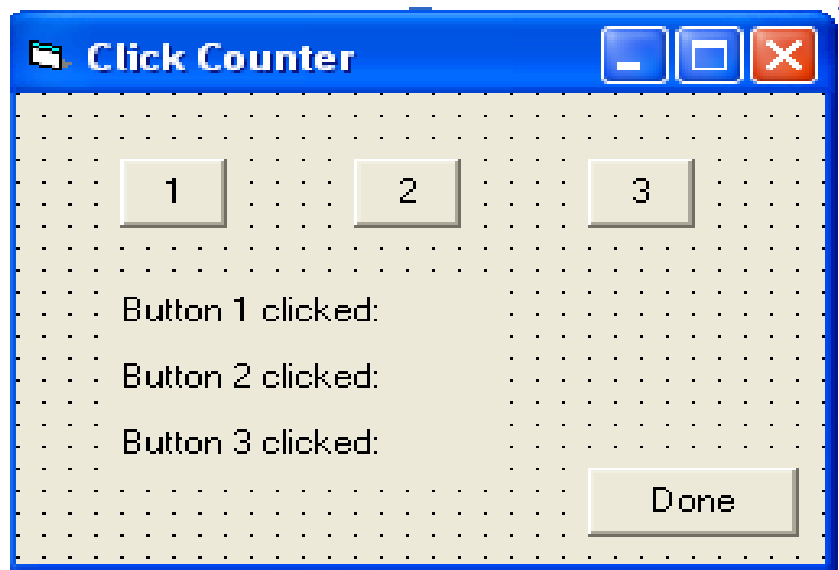
```
End Sub
```

```
Private Sub cmd3_Click()
```

```
    intNumClick3 = intNumClick3 + 1
```

```
    lblButton3Clicked.Caption = intNumClick3
```

```
End Sub
```



```

Private Sub cmdDone_Click()
    Unload Me
End Sub

```

## Check Boxes

Check boxes are similar to option button except you can selected more than one at a time. You still need to create the frame first and put your check boxes inside the frame. Check Boxes use the “value” property to determine if the box has been check or not. It uses “vbchecked” and “vbunchecked” as comparisons. If statements must be used to check to see if the box has been checked or unchecked.

## PRINT FORM

PrintForm is used to print a form during runtime.

General Form : Me.PrintForm or FormName.PrintForm

If you put the above code in a button, it will print the form when the button is selected.

### Program

1. Create the following

### Option Explicit

```

Private Sub chkBold_Click()
    If chkBold.Value = vbChecked Then
        lblStyleExample.Font.Bold = True
    Else
        lblStyleExample.Font.Bold = False
    End If
End Sub

```

```

Private Sub chkItalic_Click()
    If chkItalic.Value = vbChecked Then
        lblStyleExample.Font.Italic = True
    Else
        lblStyleExample.Font.Italic = False
    End If
End Sub

```

```

Private Sub chkUnderline_Click()
    If chkUnderline.Value = vbChecked Then
        lblStyleExample.Font.Underline = True
    Else
        lblStyleExample.Font.Underline = False
    End If
End Sub

```

```

Private Sub cmdPrint_Click()
    Me.PrintForm
End Sub

```

```

Private Sub cmdDone_Click()
    Unload Me
End Sub

```



## QUESTIONS:

1. Why did they use and if else statement for the check boxes?
2. What portion of the code above runs if a check box is unchecked?
3. How can check boxes be used in Business? Give Examples?

## PIZZA ORDER

The following program is an example on how check boxes can be use to create a pizza order. As you type the code, try to get a feel on how it works and what is happening.

### Option Explicit

```
Private Const curRegularPizzaPrice As Currency = 7
Private Const curLargePizzaPrice As Currency = 10
Private Const curPickupPrice As Currency = 0
Private Const curDeliveryPrice As Currency = 1.5
Private Const curMushroomPrice As Currency = 0.75
Private Const curPepperoniPrice As Currency = 0.75
Private Const curOnionPrice As Currency = 0.75
Private Const curHotPepperPrice As Currency = 0.75
```

```
Private intOrderNumber As Integer
```

```
Private curToppingsPrice As Currency
```

```
Private curPizzaPrice As Currency
```

```
Private curDeliveryCharge As Currency
```

```
Private Sub Form_Load()
```

```
    intOrderNumber = 1
```

```
    lblOrderNumber.Caption = intOrderNumber
```

```
    optLarge.Value = False
```

```
    optRegular.Value = True
```

```
    curPizzaPrice = curRegularPizzaPrice
```

```
    optPickup.Value = True
```

```
    optDelivery.Value = False
```

```
    curDeliveryCharge = curPickupPrice
```

```
    chkPepperoni.Value = vbUnchecked
```

```
    chkMushrooms.Value = vbUnchecked
```

```
    chkOnions.Value = vbUnchecked
```

```
    chkHotPeppers.Value = vbUnchecked
```

```
    curToppingsPrice = 0
```

```
    lblTotalPrice.Caption = curPizzaPrice + curToppingsPrice + curDeliveryCharge
```

```
End Sub
```

```
Private Sub optRegular_Click()
```

```
    curPizzaPrice = curRegularPizzaPrice
```

```
    lblTotalPrice.Caption = curPizzaPrice + curToppingsPrice + curDeliveryCharge
```

**End Sub**

**Private Sub optLarge\_Click()**

**curPizzaPrice = curLargePizzaPrice**

**lblTotalPrice.Caption = curPizzaPrice + curToppingsPrice + curDeliveryCharge**

**End Sub**

**Private Sub optDelivery\_Click()**

**curDeliveryCharge = curDeliveryPrice**

**lblTotalPrice.Caption = curPizzaPrice + curToppingsPrice + curDeliveryCharge**

**End Sub**

**Private Sub optPickup\_Click()**

**curDeliveryCharge = curPickupPrice**

**lblTotalPrice.Caption = curPizzaPrice + curToppingsPrice + curDeliveryCharge**

**End Sub**

**Private Sub chkMushrooms\_Click()**

**If chkMushrooms.Value = vbChecked Then**

**curToppingsPrice = curToppingsPrice + curMushroomPrice**

**Else**

**curToppingsPrice = curToppingsPrice - curMushroomPrice**

**End If**

**lblTotalPrice.Caption = curPizzaPrice + curToppingsPrice + curDeliveryCharge**

**End Sub**

**Private Sub chkHotPeppers\_Click()**

**If chkHotPeppers.Value = vbChecked Then**

**curToppingsPrice = curToppingsPrice + curHotPepperPrice**

**Else**

**curToppingsPrice = curToppingsPrice - curHotPepperPrice**

**End If**

**lblTotalPrice.Caption = curPizzaPrice + curToppingsPrice + curDeliveryCharge**

**End Sub**

**Private Sub chkPepperoni\_Click()**

**If chkPepperoni.Value = vbChecked Then**

**curToppingsPrice = curToppingsPrice + curPepperoniPrice**

**Else**

**curToppingsPrice = curToppingsPrice - curPepperoniPrice**

**End If**

**lblTotalPrice.Caption = curPizzaPrice + curToppingsPrice + curDeliveryCharge**

**End Sub**

**Private Sub chkOnions\_Click()**

**If chkOnions.Value = vbChecked Then**

**curToppingsPrice = curToppingsPrice + curOnionPrice**

**Else**

**curToppingsPrice = curToppingsPrice - curOnionPrice**

**End If**

**lblTotalPrice.Caption = curPizzaPrice + curToppingsPrice + curDeliveryCharge**

**End Sub**

```

Private Sub cmdPrint_Click()
    frmPizzaOrder.PrintForm
    MsgBox ("Order printed. Ready for next order.")

    intOrderNumber = intOrderNumber + 1
    lblOrderNumber.Caption = intOrderNumber

    optLarge.Value = False
    optRegular.Value = True
    curPizzaPrice = curRegularPizzaPrice

    optPickup.Value = True
    optDelivery.Value = False
    curDeliveryCharge = curPickupPrice

    chkPepperoni.Value = vbUnchecked
    chkMushrooms.Value = vbUnchecked
    chkOnions.Value = vbUnchecked
    chkHotPeppers.Value = vbUnchecked
    curToppingsPrice = 0

    lblTotalPrice.Caption = curPizzaPrice + curToppingsPrice + curDeliveryCharge
End Sub

Private Sub cmdDone_Click()
    Unload Me
End Sub

```

## **STYLE AND GUIDELINE**

1. Indent all code of If statements
2. Use appropriate prefixes and names for all objects names
3. Indent all code of the sub procedures
4. Use Comments
5. Use Option Explicit